

## Stretch Energy Code

Massachusetts gives communities two options for their building energy code – a base energy code or an optional stretch energy code. Towns can choose to adopt the stretch energy code by Town Meeting vote and it can be rescinded by Town Meeting vote. Becoming a Green Community requires that Town Meeting adopt the Stretch Code.

On January 1, 2017, both the Base Energy Code as well as the Stretch Energy Code will be updated. The difference between the two will be much smaller than in the past. In fact, the new Stretch Code will be incorporated into the new Base Code; no more extensive and separate language to describe it. Basically, new residential construction in a Stretch Code town will need to follow the Performance Path of the Base code rather than the Prescriptive Path. The updated Stretch Code will apply to new commercial buildings over 100,000 square feet. However, smaller new commercial buildings and additions, renovation, and repairs to residential of commercial buildings are not impacted by the updated Stretch code.

A key feature of the Stretch Energy Code is that it is performance based. It requires new homes to meet a HERS (Home Energy Rating System) index rating target, rather than requiring the installation of specific levels of energy efficiency for each building element (e.g. Windows, Wall insulation, roof insulation, furnace etc). The HERS rating is a measure based on a home's total expected energy use and overall efficiency. It is calculated by a certified HERS rater using accredited software, which uses information on the design of the energy systems in a home to calculate the annual energy needs of the home and give it a rating score.

One benefit of using HERS ratings for compliance with the Stretch Energy Code is that builders do not have to install specific energy efficiency measures, rather they have the flexibility to choose which energy efficiency measures to install, and how to design the home in order to meet the HERS rating target. It is also a way to ensure that homes are well built. As part of the HERS rating, the HERS rater tests the home for air leakage and inspects insulation installation, which helps ensure that the home performs as designed.

The Board of Building Regulations and Standards (BBRS) and the Department of Energy Resources (DOER), two state entities responsible for the building energy codes, have completed work on a new stretch energy code. Basically, it would require that the performance path of the standard building code be followed in Stretch Code municipalities for new homes and for large new commercial buildings. When the new Stretch Code goes into effect, the additional cost will be primarily for the services of the HERS Rater. This is generally in the \$900 - \$1500 range for residences with a \$700 - \$1200 incentive available through the Mass Save Residential New Construction Program to offset the cost. There are also typically significant annual energy bill savings that more than tip the balance to give homeowners a net savings every year.

Once adopted, the stretch energy code would take effect on January 1, 2017. Currently 178 communities, representing more than half of the state's population, have adopted the Stretch Energy Code. Nearby communities that have adopted it include Buckland (received grant of \$135,000), Ashfield (grant - \$140,000), Plainfield (grant - \$136,000), Windsor (grant - \$137,000), and Rowe (2 grant 2 - \$135,000 and \$155,000). Most builders in the area are likely familiar with the stretch energy code. Many say that the trade-off feature of the Stretch Code makes it easier to build to than the standard building code.